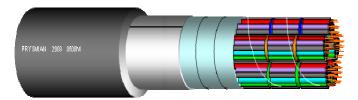


Underground copper cables in duct



A-02YSF(L)2Y...x2x0.4 / 0.5 mm (TDT 1093 Rev 01)

Foam-Skin-PE-insulated telephone cable, filled, moisture barrier sheath Based Technical Specification for Twisted Pair Copper Telephone Cables Qtel MAT 1007 of Qatar Telecom



Application

Telecommunication cable for telecommunication and data transmission, suitable for laying in ducts.

Color Coding

										Ī
Pair No.	1	2	3	4	5	6	7	8	9	10
a-wire	white	white	white	white	white	red	red	red	red	red
b-wire	blue	orange	green	brown	grey	blue	orange	green	brown	grey
Pair No.	11	12	13	14	15	16	17	18	19	20
a-wire	black	black	black	black	black	yellow	yellow	yellow	yellow	yellow
b-wire	blue	orange	green	brown	grey	blue	orange	green	brown	grey
Pair No.	21	22	23	24	25					
a-wire	violet	violet	violet	violet	violet					
b-wire	blue	orange	green	brown	grey					
Unit No. (upto 100	1	2	3	4	5	6	7	8	9	10
Colour of unit lapping	blue	orange	green	brown	grey	white	red	black	yellow	violet
Unit No (above 100	1	2	3	4						
Double	blue	orange								
Quadruple	blue	orange	green	brown						
Position of unit or	first (marker)		intermediate		last (reference)					
multiple unit (> 100										
Colour of lapping	re	ed	nat	ural	green					

© PRYSMIAN GROUP 2013, All Rights Reserved

All sizes and values without tolerances are reference values. Specifications are for product as supplied by Prysmian Group: any modification or alteration afterwards of product may give different result. The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of Prysmian. The information is believed to be correct at the time of issue. Prysmian Group reserves the right to amend this specification without prior .notice. This specification is not contractually valid unless specifically authorised by Prysmian Group



Underground copper cables in duct



A-02YSF(L)2Y...x2x0.4 / 0.5 mm (TDT 1093 Rev 01)

Construction

A-02YSF(L)2Y	
Conductor	Copper, solid, 0.4 or 0.5 mm, soft annealed
Insulation	Foam-skin-PE (02YS)
Twisting	Cores twisted to pairs,
	Cables with 5 100 pairs: 10 pairs to form a unit, max. 10 units to form the cable core. Cables with > 100 pairs: 25 pairs to form a single unit, two units stranded to form a double unit of 50 pairs or four 25 pair units stranded to form a quadruple unit of 100 pairs.
Filling	jelly filling compound, drop point > 85 °C
Cable core wrapping	At least one layer of polyester tape
Ripcord	non-metallic ripcord under moisture barrier

Mechanical properties

Bending radius	without load	≥ 15xCable diameter mm
	with tension	≥ 20xCable diameter mm
Temperature range	during operation	-20°C to + 60°C
	during installation	0°C to + 50°C

Electrical properties

at 20°C± 5°C

Conductor diameter	mm	0.4	0.5	
Conductor resistance, max. for 1% of cases	0/km	150	96	
Conductor resistance, max. permissible average	0/km	143	91	
Resistance unbalance, average	%	2.0	1.5	
Resistance unbalance, individual	%	5.0	5.0	
NEXT (for 99% of cases)				
between any two pairs at 150 kHz	dB	≥ 58	≥ 58	
between any two pairs at 1 MHz	dB	≥ 48	≥ 48	
FEXT				
between adjacent pairs at 772 kHz	dB/km	≥ 56	≥ 56	
Nominal attenuation				
at 1600 Hz	dB/km	2.37	1.84	
at 1 MHz	dB/km	27.7	23.0	
Mutual capacitance at 800 Hz				
max. permissible average	nF/km	53	53	
max. for 1% of cases	nF/km	60	60	
These figures shall vary by 3% for 100, 200 and	300 pair cable			
Capacitance imbalance at 800 Hz				
pair-to-pair	pF/500	≤ 275	≤ 275	
pair-to-pair, permissible for max. 1% of cases	pF/km	> 275	> 275	
Insulation resistance	MOxkm	≥ 1500	≥ 1500	

© PRYSMIAN GROUP 2013, All Rights Reserved

All sizes and values without tolerances are reference values. Specifications are for product as supplied by Prysmian Group: any modification or alteration afterwards of product may give different result. The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of Prysmian. The information is believed to be correct at the time of issue. Prysmian Group reserves the right to amend this specification without prior .notice. This specification is not contractually valid unless specifically authorised by Prysmian Group



Underground copper cables in duct



A-02YSF(L)2Y...x2x0.4 / 0.5 mm (TDT 1093 Rev 01)

Technical data

Cable type	Pair count	Outer diameter Approx	Weight	Max Delivery Length	Approx. Cu Weight	
		mm	kg/km	mm	Kg/Km	
	1200 PR/0.5 mm J/F	67.4	6804	450	4094	_
	1200 PR/0.4 mm J/F	55.5	4441	600	2586	
	1000 PR/0.5 mm J/F	62.0	5711	500	3411	
	1000 PR/0.4 mm J/F	50.9	3718	800	2156	
	800 PR / 0.5 mm J/F	57.1	4695	700	2727	
	800 PR / 0.4 mm J/F	47.2	3071	900	1723	
	600 PR/0.5 mm J/F	50.3	3576	900	2046	
	600 PR/0.4 mm J/F	41.6	2345	1200	1293	
A-02YSF(L)2Y	400 PR / 0.5 mm J/F	41.0	2382	1200	1363	
	400 PR / 0.4 mm J/F	34.2	1579	1200	862	
	300 PR / 0.5 mm J/F	36.1	1817	1500	1020	
	300 PR / 0.4 mm J/F	30.0	1201	1500	645	
	200 PR / 0.5 mm J/F	30.3	1246	1500	681	
	200 PR / 0.4 mm J/F	25.4	834	1500	431	
	100 PR/0.5 mm J/F	22.7	659	2000	338	
	50 PR/0.5 mm J/F	17.7	371	2000	169	
	20 PR/0.5 mm J/F	13.2	184	2000	68	
	10 PR/0.5 mm J/F	10.9	118	2000	34	
	5 PR/0.5 mm J/F	9.3	80	3000	17	

Information and data contained in the chart are prepared with due diligince and long analysis, accuracy of which is guaranteed within the integrity of whole information and data. Even the tiniest amendment will trigger repetition of the same procedure. Therefore, if a change is requested on data, you are requested to apply to Prysmian with such request, drawing spesific attention to the planned changes. Upon which Prysmian shall approve in writing by repeating the same analysis procedure. Prysmian, shall not be held liable from changes made unilaterally, without following the due procedure. No action by Prysmian, shall be construed as implicit approval to such changes.

© PRYSMIAN GROUP 2013, All Rights Reserved

All sizes and values without tolerances are reference values. Specifications are for product as supplied by Prysmian Group: any modification or alteration afterwards of product may give different result. The information contained within this document must not be copied, reprinted or reproduced in any form, either wholly or in part, without the written consent of Prysmian. The information is believed to be correct at the time of issue. Prysmian Group reserves the right to amend this specification without prior .notice. This specification is not contractually valid unless specifically authorised by Prysmian Group